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Challenges in the translation of video games

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Resum: Aquest article presenta els diferents tipus de text que poden trobar els traductors quan treballen per a la indústria del software d'entreteniment multimèdia interactiu i explica que els videojocs exigeixen habilitats diferents als traductors, com ara conèixer les memòries de traducció, ser capaços de cercar informació i ser creatius.

Paraules clau: Videojoc, localització, traducció, localització de jocs, localització, software d'entreteniment, software multimèdia interactiu

Resumen: Este artículo presenta los distintos tipos de texto con los que se pueden encontrar los traductores cuando trabajan para la industria del software de entretenimiento multimedia interactivo y explica que los videojuegos exigen habilidades distintas a los traductores, como por ejemplo, conocer las memorias de traducción, ser capaces de buscar información y ser creativos.

Palabras clave: Videojuego, localización, traducción, localización de juegos, localización, software de entretenimiento, software multimedia interactivo

Abstract: This article explains the many different textual types that translators might find when working for the multimedia interactive entertainment software industry, and how different video games may require a variety of skills from translators, such as proficient TMT use, good research techniques and inventiveness.

Keywords. Video game, localisation, translation, game localisation, localization, game localization, entertainment software, multimedia interactive software

1. Introduction

Video games are one of the leisure activities of choice of many people around the globe. Male and female children and adults alike are taking to digital games as a pastime activity they enjoy just as much as reading, watching a film or going to the theatre. The demand for entertainment software has prompted game publishers to translate more of their products into more languages. However, the nature of multimedia interactive entertainment software products seems to require a particular kind of translation. The development of new professional practice calls for new research within translation studies and a new area of specialisation. From a game

featuring Tiger Woods to another based on *The Hobbit*, a World War II strategy game or a science-fiction role-playing game, it is obvious different areas of knowledge are going to be involved, as well as a specific set of different skills.

At first glance, and putting aside the question of terminology (discussed in Bernal-Merino 2006), the translation of video games does not seem to be substantially different from other types of translation. As an audiovisual product, it relates to the translation of other audiovisual media, such as films and TV programmes, and it therefore has something in common with translation and dialogue writing for dubbing (Agost & Chaume 2001), as well as translation for subtitling (Díaz-Cintas 2004). As a software product, it also relates to software localisation (Esselink 2000). However, translators going into game localisation will have to deal with a very particular mixture of challenges, creativity being one of them (Mangiron & O'Hagan 2006). As analysed in Bernal-Merino (2007), there are different positions for translators and language specialists within the game localisation industry; from the linguistic tester to the localisation manager, they all have an important part to play in the process. Time, as ever, is a key variable in the equation. Most games take between one and two years to develop. In some cases, the translation of linguistic assets may start once the script is closed, but it is common practice to begin when the game is completely finished. When game development does not adhere to project deadlines, the localisation process is squeezed in between the end of development and the sim-ship (simultaneous shipment) date, which, because it obeys seasonal market forces, is a final, unmovable deadline. In these rather frequent cases, publishers may double up on the number of translators and testers to compensate for the delay. However, team translation and coping with long working days are not the most challenging tasks of working for the game localisation industry. Because of the strict observance of copyright laws and the fact that the video game may often not actually be finished, many translators have to work almost in the dark, i.e. without the game itself. From the translator's point of view, it is far more taxing and conducive to errors to work without context and co-text to aid decision-making. However, this will be analysed in future articles. I will now focus on the variety of games and of the textual types within each entertainment software product in order to demonstrate the diversity involved for those unacquainted with the game industry.

2. Different games, different translating skills

Video games can vary widely and wildly, from the stories they tell to the gameplay they involve and the way they relate to existing creations, historical events and popular culture. In fact, the themes covered by today's game industry can be so distant from each other that the translation of these products may require specific training and research skills in order to cope with the demands of a particular project. It is highly advisable for translators going into this area of specialisation to be acquainted with game genres so as to know what to expect before the commencement of the project, and they can prepare by exploring the local market for similar products.

There are many different classifications of video games. Even though they all apply similar categories, they appear to be unable to fully agree with each other. The problem seems to be that different criteria have been employed within each model, producing uneven categories that, strictly speaking, can be more confusing than helpful. These categorisations are based on labels used to refer to new types of games as they appeared in the market back in the 80s and 90s. Once a label was established, thanks to a very popular title, it created the genre and most people kept on using it regardless of variations. The situation can be confusing, however, and some game publications consequently prefer not to assign genre labels to games in order to avoid preconceptions, while others use categories that can be interpreted as overlapping. A good example is "shooting" games. These games can also be called "shooters" as a generic, "first-person" or "third-person shooters" (depending on the perspective used), "tactical shooters" (where more accuracy and less ammo wastage is required) or "shoot-em-ups" (when perhaps a faster and more chaotic type of gameplay is favoured), but the challenge facing players is basically the same. The category becomes more blurred when a rich storyline is built into the action. *Max Payne* is one such game. Most of the action is still shooting, but an interesting and involving storyline makes players carry out other tasks and gives a whole different meaning to

the violent parts of the game. It is considered an action game, a shooter, an adventure shoot-em-up or a modern shooter, depending on the source you read. While game genres might give us some information about what a game is about or the type of gameplay it involves, terminological standardisation would be very helpful both for the industry and for research purposes. This topic will be explored in forthcoming articles.

From the point of view of translation, we could say that there are only two types of games, based on the degree of freedom translators are given. Effectively, some games require more research than creativity, and others require more creativity than research. Video games very often draw on different elements of popular culture, such as films, literature, comic books or sports. When this is the case, the text to be translated will require a proficient understanding of the jargon used and an accurate rendering of that particular terminology for the locale. In a way, the best translators are like chameleons when it comes to changing tongues, because they can make their language blend in seamlessly with the right linguistic context. It is obvious that translating a game based on 'Sponge Bob' has little to do with translating one based on the UEFA Champions League, World War II or 'Spider-Man'. If the game is, for example, a rendering of 'Conan the Barbarian', as written by Robert E. Howard, the first step for translators would be to acquaint themselves with the literary universe and the official translation of the books. There is no freedom in this case; translators are constrained by pre-existing common knowledge and a body of fans with very specific expectations for the game universe and the way its inhabitants express themselves, etc. Betraying those expectations with a translation that disregards the existing translated universe will probably result in discontent fans and poor sales. Translators will have to make use of their research skills, as well as their stylistic writing skills, so the text feels similar to something Howard might have written, had he been born in the translator's territory.

If, on the other hand, the game is based on a completely new idea, or one that is at least new to the receiving locale, the degree of freedom is considerable and a rather creative, playful approach to the task will be necessary, similar to that required in the translation of children's literature; think of the translation of Dr. Seuss books for instance. Of course, no game is produced in a vacuum and they may all have elements of existing creations, but the limitations are less strict when translating *Animal Crossing* than when translating *Harry Potter*. Mangiron & O'Hagan (2006) give a very good account of the relevance of creativity when translating *Final Fantasy*. In such cases, translators are encouraged to produce an exciting translation that sits well with the game and enhances players' experience, whatever their language. In an article printed in *Edge* (a popular and respected games publication), Richard Honeywood, head of localisation at Square Enix, explains:

> Sometimes the planners are so impressed with changes to the translated version, they give us extra information or add extra scenes into the game to improve the presentation of the changes. It's more like we are planning the gaming together than translating.
>
> *Edge* (Feb. 2006), "You say tomato"

However, games give rise to a lot of texts to translate aside from the actual game, and those texts are very different from each other. People unrelated to the entertainment software industry might find the quantity and quality of translatable assets it produces quite surprising. I shall elaborate on this textual variety in the following paragraphs.

3. Translatable assets generated by the game industry

Most video games will require the translation of thousands or even hundreds of thousands of words from the beginning of the project to the end. Within these products, there are different textual types, each of which has its own characteristics and purpose. Because we are dealing with a multimedia product, translators also face challenges of a multimedia nature. Within the same project, they have to deal with a wide variety of issues, such as reproducing the oral quality of dialogue in writing for subtitling and pop-up dialogue windows, lip-synching for

dubbing, space and time constraints for subtitling, the number of characters per subtitle, UI constraints, etc. The following paragraphs are an attempt to show the various textual types that accompany the standard PC video game:

1. **Manual**: Although it always has some attractive, engaging creative writing, partly promotional and partly literary, most of a manual is normally filled with didactic texts with instructions to be followed to fully enjoy the game. It also includes technical texts about the appropriate hardware and software specifications to be able to run the game application. In addition, players will always find corporate and legal texts, informing users of the rights and responsibilities associated to the acquisition of an entertainment software product.

2. **Packaging**: Like a manual, a game's box and packaging present a mixture of textual types, the difference being the space provided, which is limited by its small size, images, logos and legal labelling requirements. Packaging combines alluring promotional texts with concise technical information and legal notices.

3. **"Readme" file**: This short .txt file is probably the last thing created in the development process. It is used to inform users of all the last-minute adjustments and how to make sure that the product runs smoothly, as well as to correct mistakes and typos in the printed material. It is mainly a technical text.

4. **Official website**: An official website combines a promotional text with a journalistic one, but will also contain some technical details. Websites tend to include product previews and reviews, notice boards, customer support, etc.

5. **Dialogue for dubbing**: This is a written text that has to sound fresh, like oral language. Written scripts are normally set out in spreadsheets or tables. There will be a separate sound file per utterance. Speech delivered by game characters may display a variety of registers, accents and idiosyncrasies to be conveyed in other languages.

6. **Dialogue for subtitling**: This text is of an oral nature, but it has to be represented in written form. In addition, translators may be faced with the fact that not all languages allow for the same freedom when writing subtitles. Translators will often have to apply techniques used in the translation of comic books, for example, to convey certain characteristics that would otherwise be lost, such as accents.

7. **UI** (user interface): Space in menus, pop-up windows and hint captions is at a premium, and redesigning is rarely an option, so translators have to maintain a comparable number of characters to that of the original label or content. Similarly to the case of software localisation, video games may have very detailed, crowded menu options for controlling different game features, such as difficulty level, graphic display selection, mouse sensitivity or feedback preferences.

8. **Graphic art with words**: A multilayered graphic format is often used. One of the layers may contain the graphic art from the game, while other layers are created for the title, the age-rating sign, etc.

The most commonly used file types are .txt, .rtf, .doc and .xls, which are compatible with most operating systems. The translation industry is increasingly turning to CAT (computer aided translation) tools, due to the fact that they can boost productivity and terminological consistency if used correctly. TMTs (translation memory tools), such as Trados, are a must in the localisation industry, and translators are advised to make the most of them if they are to meet the tight deadlines typical in this fast-paced industry. Quah (2006) provides a great insight into how new technologies and initiatives may be of benefit to language and translation professionals. Unfortunately, the software localisation industry has not yet been able to create a GUI (general user interface) localisation tool, like those used in the translation of utility software and web pages, for translators to use with video games. Programs such as *Catalyst* and *Passolo* allow users to work directly but safely with code, generating a visual representation of

the final product, which means that translators can see exactly what the end result would be and are able to adjust the text or the interface to suit the space available. Although the localisation development industry is interested in tapping into the game market, the lack of standards in tools and formats makes such a venture impossible at the moment. The LRC (Localisation Research Centre) and LISA (the Localization Industry Standards Association) have ample information on the programs in question.

I will now provide a more detailed explanation of the difficulties that translators working for the entertainment software industry have to deal with, given that, in order to be able to fulfil their role satisfactorily, it is highly advisable for them not only to know about game mechanics but also to understand the logic behind game code.

4. Text fragmentation

Fragmentation is one of the features of texts within the interactive entertainment software industry. This is not to say that there is no story, or that games have a random and chaotic sequence of events, but that the story is also dependent on the individual performance of the player, and the underlying structure is provided by the game code that makes interactivity possible. In video games, most things happen as and when players trigger them through their actions. In fact, this interactivity, the relative freedom to resolve situations in the way and at the pace players choose to, is part of the appeal of such games. This feature of entertainment software products has great influence on their design and, more importantly in our case, on the way scripts have to be written and translated. Chandler, an experienced game writer, explains his techniques and reasons:

> Oddly enough, an accounting spreadsheet can be a writer's most effective tool. I use Excel to keep track of my dialogue, as do many writers. It's particularly useful when preparing "active format" dialogue (any dialogue taking place in-game, where multiple variables can make it a challenge to keep track of all possible dialogue threads). (Chandler 2006).

Everything in a video game has to be programmed through the game code, which is basically an artificial language that gives instructions to the computer. Programming languages have been optimised to produce the best result with a minimum of commands, memory use and variables. Readers can see a real example of source code if they go to their internet browser and click on ‘View’ and then ‘Source’. This is the type of text that programmers have to generate for consumers to see the user-friendly version. It is not impossible to understand, but it is certainly a far cry from a novel, a manual or a screenplay. Game source code is even more cryptic to the untrained eye. It is for this reason that localisation engineers have to extract all the linguistic assets of the game and present them to translators in a format that is useful for all parties in the team. The preferred format for the presentation of material is the table and the spreadsheet. Information and character dialogue may be fragmented, but also easier to find for everybody involved in the localisation process. By allocating each piece of information a separate cell, the team is able to work with a more understandable source, and programmers can then safely insert the localised strings back into the game code, avoiding the potential problems of having people without technical knowledge editing the source code.

Tables are ideal tools for organising data, but not for telling stories. However, as mentioned earlier, stories in video games are non-linear because they depend on players’ decisions. Tables have the advantage of organising the multi-threaded possibilities available to players in such a way that everybody involved in the project can find exactly what they need. Contextual information will only come from the spreadsheet’s other cells, which might not have any chronological relevance to each other. Translators accustomed to more traditional kinds of work will most likely resent this lack of context.

5. Translating variables

Most games allow players to choose their name, gender, nationality, etc. This means that translatable strings will need to incorporate 'variables' (similar to those used in mathematics or physics) for the game code to be able to take such data into account and present the right text correctly phrased.

Variables can be used in many complex ways to enhance players' immersion by addressing them, their chosen profile and their performance directly. For example, strategy games allow the player to choose among different nations to conquer the world. When someone attacks you, the message received says "/n nameofnation /n is attacking you!". Names of nations vary widely from one language to another. They may take an article or not; they can be singular or plural, as well as masculine or feminine. Not only do translators therefore have to be careful with the syntax of the sentence and the possible relocation of the variable, but they also need to be aware of potential changes due to the morphology of individual linguistic items. The formula in question could generate a sentence such as "Rome is attacking you!", but it could also produce "The Vikings is attacking you!". Whenever possible, programmers and designers opt to rephrase sentences to avoid these grammatical hurdles of natural languages. The above message, for example, could be rewritten in the passive voice, as "You are being attacked by /n nameofnation /n!", so the formula would allow for both "the Vikings" and "Rome". However, this might not be an option for all target languages.

Unfortunately, there is no set way to indicate variables; this will depend on the SDKs (software development kits) used and on the lead programmer of each project, which means that different games designate variables in different ways. Translators have to be aware of which strings belong to the game code and which strings belong to localisable assets, since a mere character in the wrong place may cause the game to crash or even the computer to lock up. The previous example shows how a rather simple variable that works perfectly with English might prove to be complicated in other languages due to syntax, usage and orthography, apart from the obvious space constraints.

Other games use concatenated strings with variables to give feedback to the player. *Guitar Hero II* (Harmonix 2007) does this through newspaper headlines. After each challenge, the player is thus presented with the cover of a newspaper saying something along the lines of "Incredible performance from the Boyz at the Plaza!". The coded string would look like this: "<ADJ> <NOUN> from <BAND> at <VENUE>!". The game code will include a list of variables where each 'adj', 'noun', 'band' and 'venue' is allocated a table and a value to account for quality of performance, synonyms of performance, names of bands and names of venues respectively. The above formula could therefore also generate "Poor show from the Boyz at the Plaza!" or "Unique concert from Claxon5 at the Coliseum!". This formula works relatively well for analytic languages, such as Chinese or English. However, it is conducive to errors when dealing with synthetic languages, due to the high degree of concordance between articles, pronouns, substantives, adjectives and verbs in a sentence. If the game code does not allow for such morphological and syntactical agreement, translators will have to limit their options to one gender and one number, which could produce a very unnatural discourse.

6. Conclusion

The aim of this short article was to highlight the complexities of translating multimedia interactive entertainment software products. Video games are one of the many products affected by globalisation, and both developers and publishers need to realise the importance of an internationalised game-code design for the purposes of localisation. Nevertheless, the challenge of improving game localisation (product and process) requires a multifaceted approach where many professionals have a role to play. Translation studies and localisation scholars need to study the characteristics of game localisation in order to improve existing practices. Universities and higher education training centres can also help by working with experts from the industry to create modules on the translation of video games. I am convinced that a small effort from all the parties involved would benefit not only translators (by improving

their working conditions) but also the game industry (by increasing sales of localised versions), translation studies (by contributing to a better understanding of the complexity of language transfer) and translation programmes (by offering a new and attractive area of specialisation).

Bibliography

Agost, R. & Chaume, F. (2001). *La traducción en los medios audiovisuales*. Castellón de la Plana: Universitat Jaume I.

Edge. (February 2006). “You say tomato” (pp.74-81)

Bernal-Merino, M. (2007). "Training translators for the video game industry", in J. Diaz Cintas (ed.) *The Didactics of Audiovisual Translation*. Amsterdam/Philadelphia: John Benjamins.

Bernal-Merino, M. (2006). “On the Translation of Video Games”. The Journal of Specialised Translation, Issue 6: 22-36. <http://www.jostrans.org/issue06/art_bernal.php>

Chandler, H. (2005). *The Game Localization Handbook*. Massachusetts: Charles River Media.

Díaz-Cintas, J. (2004). *Teoría y práctica de la subtitulación*. Barcelona: Ariel.

Esselink, Bert. (2000). *A Practical Guide to Localization*. Amsterdam/Philadelphia: John Benjamins.

Mangiron, C. & O’Hagan, M. (2006). “Game Localisation: unleashing imagination with ‘restricted’ translation”. The Journal of Specialised Translation 6: 10-21. <http://www.jostrans.org/issue06/art_ohagan.php >

Quah, C. K. (2006). *Translation and Technology*. Hampshire/New York: Palgrave Macmillan.